# #31 #431 12/26/02

## IN THE UNITED STATE PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Possley

Art Unit: 2814

Serial No.:

09/262,458

Examiner: N. Ngo

Filed:

March 4, 1999

For:

**GATE ARRAY ARCHITECTURE** 

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231 RECEIVED

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30 ARD OF PATENT APPEAL

AND INTERFERENCES

<u>REPLY BRIEF</u>

IN SUPPORT OF APPELLANT'S APPEAL

TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Dear Sir:

Pursuant to 37 C.F.R. §193(b)(1), Appellant hereby replies to the Examiner's Answer dated May 24, 2002.

Claims 1-11, 21-26, and 44 are the subject of this appeal. Claims 13-20 and 27-43 have been withdrawn and either currently are or shall be the subject of one or more continuation applications. The subject matter of claim 12 as originally filed is covered by claim 44.

The Examiner's answer maintains his rejection of claims 1-11, 21-26, and 44 under 35 USC 103(a) as being unpatentable over Tran et al. (hereinafter, "Tran") in view of Sato. It is noted that the Examiner's answer also includes a new ground of rejection of these same claims as being unpatentable over Sato under 35 USC 103(a). This new ground of rejection is addressed in more detail below.

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### **PRELIMINARY ISSUES**

Before expounding on the merits of the issues surrounding the above-referenced patent application, several preliminary issues are worthy of note.

First, it is noted that the Board of Patent Appeals and Interferences in an order, dated September 27, 2002, returned the above-referenced patent application to the Examiner for correction. The Examiner had indicated in an advisory action, dated June 1, 2001, that amendments made to claims 1, 21, and 44 would be entered upon the timely filing of a Notice of Appeal and Appeal Brief. The order indicated that this had not occurred.

Applicant/Appellant is unaware of whether this correction required by the Board has, in fact, taken place or not. Appellant has, however, received no new correspondence indicating that it has. Nonetheless, rather than forfeit any rights, Appellant is filing this reply brief in compliance with the requirements that would otherwise apply if the above-referenced case had not been returned to the Examiner for correction.

Second, in his answer, the Examiner has indicated that the brief filed by Applicant/Appellant "does not contain a statement identifying the related appeals and interferences...". This is not correct. The required statement is contained on page 3 of the brief as filed by Appellant on February 8, 2002.

Third, it is noted that the Examiner has provided a new ground of rejection "[s]ince [according to the Examiner] the scope of the independent claims 1 and 21 was changed by the amendment after final filed on May 11, 2002, ...". Appellant is unclear as to why this new ground of rejection could not have been presented at the time of the amendment, and, even further, why it is that the ground of rejection was necessitated by the amendment after final, in that, as appears to be suggested by the Examiner, the rejection could not have been made prior to that amendment. Regardless, Appellant will respond on the merits to this new ground of rejection below, this being the Appellant's first opportunity to respond on the merits to this particular rejection.

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### RESPONSE TO EXAMINER'S ARGUMENTS REGARDING GROUP I CLAIMS

#### ARGUMENT A OF APPELLANT

As indicated above, the Examiner, under section 103 of the patent statute, has rejected the Group I claims, claims 1-11, 21-26 and 44. It is well-established that for a prima facie rejection under section 103, the Examiner must provide a prior art document or set of documents that, in combination, have each and every limitation of the rejected claims. See, for example, MPEP, section 2143 ("To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.") This, of course, is to be distinguished from anticipation, where each and every limitation must be shown within a single document. It is asserted that the Examiner has failed to establish a prima facie case.

The Examiner states, in his answer, that Appellant is wrong in his construction of the claims. Specifically, the Examiner states, on page 6, for example: "'[O]ne' in claim 1 and 21 refers to 'polysilicon gate', not 'one of the regions forms both N-type and P-type transistors'." Suffice it to say that Appellant believes the Examiner is correct and that Appellant's previous position is mistaken. Therefore, Appellant is submitting with this reply a corrected opening brief, consistent with the construction as indicated by the Examiner.

Nonetheless, granting that the Examiner is correct in his position regarding how the claims should be interpreted, he has still failed to present a prima facie case under the construction that he, himself, advocates. Specifically, neither Tran nor Sato, either separately or in combination, teaches, shows, or even suggests at least one polysilicon landing site forming N-type and P-type transistors.

The Examiner states in his answer, page 3: "Sato discloses in figure 9 that one gate can be formed on both N-type and P-type transistors to form the basic cells. Therefore, it would have been obvious to one of ordinary skill in the art to form a single polysilicon gate in Tran on both N-type and P-type transistors to form a basic cell as taught by Sato." However, the Examiner is clearly reaching. Sato, by itself, does even not teach, suggest, or describe forming a single polysilicon gate to connect N-type and P-type transistors. Therefore, to say that based on Sato it would have been obvious to modify Tran to do so is misplaced. It is clear that this limitation as now recited in, for example, claim 1, and as correctly interpreted, is not present in any of the cited patents, either individually or in combination.

The Examiner, also on page 5, responds to Appellant's argument that Tran is deficient in that it would require additional layers of metallization, in contrast to the subject matter of the rejected claims. The Examiner specifically states: "Since the gate electrodes are formed in advance over the N-type and P-type transistors as showed [sic] in figure 9, there is no need to form additional layers of metallization to connect N-type and P-type transistors as argued."

The Examiner could not be more incorrect in this regard. It is precisely because the cell layout is determined "in advance" that the additional layers would be required in Tran. In these designs, a single cell approach is being used to meet the requirements of a variety of customers without knowing, at the time that the single cell is designed, what the specifics of the design for each customer will ultimately be. In Tran, because the N and P transistors are not coupled or connected, if a customer desires that they be connected or coupled, this will involve additional layers of metallization. Thus, the subject matter of the rejected claims provides several advantages over Tran, including reducing the number of layers of metallization.

#### **ARGUMENT B OF APPELLANT**

In addition to failing the meet the limitations of the rejected claims, the combination proposed by the Examiner is improper. The Examiner responds to this argument on page 6 of his answer. He states: "The teaching in Tran is not limited to a multiplexer circuit and the teaching in Sato is not limited to a RAM cell." However, this response misses the point.

Even granting, for the sake of argument, that the Examiner is correct, his point is legally insufficient to establish motivation to combine. Even if he is correct that these disclosures, by their own terms, do not necessarily limit themselves, that does not address the fact that, based on the contents of these disclosures, one of ordinary skill would not attempt the combination that the Examiner proposed. If they are unlimited, as he indicates, this still does not provide the missing motivation or suggestion to combine that is required.

This type of reasoning is precisely what the Federal Circuit has warned against. For example, in the case of In re Rouffet, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998), the Federal Circuit stated:

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In this case, the Board ... relied upon the high level of skill in the art to provide the necessary motivation. The Board did not, however, explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. Instead, the Board merely invoked the high level of skill in the field. If such a rote invocation could suffice to supply a motivation to combine, the more sophisticated scientific fields would rarely, if ever, experience a patentable technical advance. Instead, in complex scientific fields, the Board could routinely identify the prior art elements in an application, invoke the lofty level of skill, and rest its case for rejection. To counter this potential weakness in the obviousness construction, the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.(emphasis supplied)

It is respectfully asserted that here the Examiner has engaged in the same practice criticized by the Federal Circuit in Ruoffet. The Examiner has not provided any underlying principles or technical understanding that would motivate one of ordinary skill to make the combination, and, instead, has merely engaged in "hand waving" to argue that, nonetheless, making the combination would be obvious to one of ordinary skill in the art anyway. As the Federal Circuit has indicated, this approach should not be encouraged.

#### RESPONSE TO NEW GROUND OF REJECTIONS

As indicated above, the Examiner has provided a new ground of rejection that is apparently premised on the Appellant's amendments after final. Appellant is unclear as to why this new ground of rejection could not have been presented at the time of the amendment, and,

even further, why it is that the ground of rejection was necessitated by the amendment after final, in that, as appears to be suggested by the Examiner, the rejection could not have been made prior to that amendment. Regardless, Appellant will respond on the merits to this new ground of rejection below, this being the Appellant's first opportunity to respond on the merits to this particular rejection.

It is noted that the same requirements for a <u>prima facie</u> case as indicated above apply in this instance. Here, the Examiner has based his rejection on an individual patent rather than a combination of patents. Such a situation is even less likely to meet the appropriate legal burden on the Examiner because, as stated in <u>In re Kotzab</u>, 54 USPQ2d 1308 (Fed. Cir. 2000),

"Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference."

Here, the Examiner has failed to even provide the appropriate motivation for such a modification. More to the point, the Examiner does not even attempt to address the limitation of the rejected claims regarding at least one polysilicon landing forming both N-type and P-type transistors. Rather he states, on page 4: "[I]t would have been obvious that Sato discloses a single gate electrode formed on two smaller N-type and P-type diffusions to form smaller N- and P-type transistors and another single gate electrode formed on two larger N-type and P-type diffusions to form larger N- and P-type transistors." However, it is clear that this does not address what is recited in the rejected claims, such as claim 1. Furthermore, by

relying solely on Sato, the Examiner has failed to provide any prior art that would provide the basis to modify the teachings of Sato to met the limitations of the rejected claims.

### **CONCLUSION**

Appellant respectfully submits that all the pending claims in this patent application are patentable and request that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of all the rejected claims.

Respectfully submitted,

Gregory D. Caldwell Registration No: 39,926

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner of Patenta, Washington, D.C. 20231 on:

November 25.

Name of Person Mailing Correspondence

Canque C. Seen

Date 11. 65.00